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ABSTRACT

Today's vocational education program can be traced to basic principles established during the formative period of vocational education. Although the implementation of vocational education may change, basic principles continue to stand. Four points of view, randomly selected from the past 200 years, which seem to be present in vocational education programs today are the concepts of: (1) an educated worker, (2) "who" in vocational education, (3) what constitutes vocational education, and (4) professional association. The impact of the concept of the educated worker was reflected in the support of general/vocational education by labor unions during the 1800's, the elements of general/vocational instruction of the Smith-Hughes Act, and the broad educational goals stated by the National Society for the Promotion of Industrial Education (NSPIE) in 1907. Likewise, the concept of "who" in vocational education was inclusively pronounced in 1908: "Race, creed, color, sex, or national origin shall not debar anyone from vocational education." In regard to what constitutes vocational education, the principle of social concern and relationship of vocational education to social well-being has not changed. Moreover, the American Vocational Association is based upon the earlier foundations of the NSPIE and the National Society for Vocational Education. (EA)

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Occasional Paper No. 15

IMPLICATIONS FROM THE HISTORY OF VOCATIONAL EDUCATION

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- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

FOREWORD

Dr. Melvin L. Barlow, Professor of Education at the University of California at Los Angeles and Director of the Division of Vocational Education, University of California, presented a paper to The Center and The Ohio State University staff on the topic of "Implications from the History of Vocational Education." Professor Barlow's acknowledged leadership in the field of vocational education well qualifies him to recognize and analyze the problems persisting today in vocational education.

In his paper, Dr. Barlow considered the implications for vocational education today from the history of vocational education. He outlined from its history, four points of view which seem to be present in vocational education programs today. These are (1) the concept of an educated worker; (2) the concept of "who" in vocational education; (3) the concept of what constitutes vocational education; and (4) the concept of professional association.

A native of Tulsa, Oklahoma, Dr. Barlow received a Bachelor of Arts (1933) and Master of Science degree (1934) from the University of Southern California; and the Doctor of Education degree (1949) from the University of California at Los Angeles. Professor Barlow's experience in the field of vocational education is extensive and includes: (1) research physicist and petroleum production engineer, (2) junior college instructor, and (3) supervisor of Trade and Technical Teacher Training, California State Department of Education and the University of California. He assumed his present position of Director, Division of Vocational Education within the University of California in 1953.

In addition, Professor Barlow was a member of the research staff for the Panel of Consultants on Vocational Education, Washington, D.C. in 1962; a consultant to the Department of State (Project in Turkey in 1965); a consultant to the Cross Cultural Study of Mathematics, UNESCO, Hamburg, Germany in 1966; Director of the Advisory Council on Vocational Education, Washington, D.C. in 1967; a member of the Evaluation Team for the American Vocational Association Project in Turkey in 1968; and Director of the Allied Health Professions Project, Division of Vocational Education.

In 1969 Dr. Barlow was appointed by the Governor as a member of the California State Advisory Council on Vocational Education, and in 1970 he was appointed by the Governor as a member of the Job Training Development and Placement Service Advisory Board, California Department of Human Resources Development.

Dr. Barlow's publications have been extensive and include *History of Industrial Education in the United States* (1967). He also was an editor of the American Vocational Association Yearbook in 1974, *Philosophy for Quality Programs of Vocational Education.*

Professor Barlow has received many honors including a citation as Outstanding Educator from American Society of Tool and Manufacturing Engineers in 1969. Outstanding Services Award from the American Vocational Association in 1970, a Ship's Citation of the Educational Institutions

Association in 1971, and a Distinguished Service Award in 1975 from The Center for Vocational Education.

On behalf of The Ohio State University and The Center for Vocational Education, we take pleasure in sharing with you Dr. Melvin Barlow's presentation, "Implications from the History of Vocational Education."

Robert E. Taylor
Director
The Center for Vocational Education

IMPLICATIONS FROM THE HISTORY OF VOCATIONAL EDUCATION

For nearly thirty-five years the history of vocational education has held me in spellbound fascination. Truly, "the past is prologue," and nearly everything discussed during the last forty to fifty years in vocational education can be traced to our historical beginnings, particularly the period of 1906-1917. I hold in great faith the position that all of our basic principles were determined during that period, and that they are as sound for 1976 as they were for 1906.

Vocational education emerged upon the educational scene in 1917 full-blown in its basic structure (like Minerva from the head of Zeus). Eleven years of discussion had gone into the formation of the structure of vocational education—eleven years of dialog among persons in education, industry, business, agriculture, the home, and the public at large. There were women and men of great vision who believed in people and the rights of people to be prepared for the world of work as a part of their basic educational experience. They debated, ad infinitum, the fine points of vocational education and reached agreement with great difficulty. At one time around the turn of the century, Charles A. Bennett returned home from a professional meeting deeply discouraged—"there wasn't enough difference of opinion to have a good discussion," he said. It was this deep examination of foundation issues that gave strength to the basic structure of vocational education.

A long list of major decisions preceded the formation of vocational education. The fight to establish a public education system at the elementary school level, and to make it free, were tremendous battles. Many people felt that the idea of educating every Tom, Dick, and Harry was preposterous—and Tom, Dick, and Harry were not very happy about the idea either. The evolution of the concept of educating women is in itself a fascinating study. Extending the system beyond the elementary school constituted almost the impossible dream. But it did happen at an astonishing rate after 1872.

Education did gain a foothold, and with more and more people going to school the prevailing curriculum came under attack. In the main it was the high school that caused all of the trouble. The high school fit into the educational structure in an awkward way. At first it was known as the "people's college," meaning that the high school was a post-elementary school for persons who wanted additional education but no further than grade twelve. Had the theory been correct there would have been no problem, but great numbers of the graduates decided to continue their education into the colleges and universities, and some of the high school graduates made this change with great difficulty. It was the curriculum in the high school that caused the problem. What the students wanted to get out of high school, and to some extent what society wanted them to have, did not match conveniently with what the colleges and universities thought they should have studied in high school. Around the turn of the century a number of national committees and commissions studied the problem, and their reports influenced what would come to be known as the college entrance curriculum. Suffice it to say that this differed considerably from what the future vocational education curriculum would consider adequate preparation for a job.

Turning our attention back 200 years to 1776, we find three ways in which a person prepared for work. The first was organized apprenticeship. This was generally pretty good. The two types—voluntary and involuntary—provided apprentices, whether boys or girls, with five basic elements:

(1) food, clothing, and shelter; (2) religious instruction; (3) general education (3R's); (4) instruction in a trade or occupation; and (5) the mysteries of the trade (related subjects). Involuntary apprenticeship provided a neat way for towns to take care of their child welfare cases (particularly in the earlier Colonial period). A second way of preparing for work was in a mother-daughter, or father-son relationship in which the fundamentals of a trade or occupation were taught to children in the family. This process is as old as time. The third was the pick-up method, by observation and imitation, but with little actual instruction. A sharp boy or girl, bent upon learning a trade could ultimately pick-up the essential information needed to begin. Experience at doing the task finally made him a craftsman. But vocational education, as we know it today is strictly a twentieth century invention.

The historical situation confronting education during the first 100 years of our national period has been well documented and is generally well known. It has always been convenient for me to accept Ellwood Cubberley's point of view that the year 1820 represented the beginning of educational consciousness in this country. Prior to 1820 the general population couldn't care less about education; after 1820 they began to care. Obviously this is not a magic date but the rapidity with which things educational begin to happen increased after 1820.

Without taking time to document this fabulous period of American educational history let me identify four points of view that seem to be present in today's vocational education program—points of view picked up at random from the first 200 years.

First, the concept of an educated worker. This was sometimes referred to as a need for "industrial intelligence," or "mechanical intelligence," but in all cases an upgrading of the worker in his skill and general knowledge was either directly stated or implied. In the early 1800's labor unions made specific attempts to develop schools in which the children of working people could get a proper education. This of course meant many things. In one case a labor group actually bought a struggling high school for their own purposes. It is interesting to note that labor has been consistently—actually throughout the 200 years—a constant supporter of education in general and vocational education in particular, and in addition has been a strong constructive critic of each to their ultimate benefit.

The concept of the educated worker had a definite impact upon the Smith-Hughes Act. Remember that the high school program specified that vocational instruction should occupy about a half day and that general instruction should occupy about a half day. Note that both elements were needed—general instruction and vocational instruction. In addition, in the Smith-Hughes Act, continuation schools and adult instruction tended to have qualities of both the general and the vocational. The point is that vocational education demands of the student competencies in both areas. Much of the time the emphasis has been upon the general and not the vocational and the vocational education theorists always cite positively the need for both. When I hear people criticize vocational education for its "narrowness" or its "vocationalism," I know immediately that the critic is nearly completely ignorant of vocational education history. In short, he doesn't know what he is talking about!

What were the educational goals of labor, management, education, and the National Society for the Promotion of Industrial Education? This is what they were saying in 1907:

> Our first task, a task to which everything else is subordinate, is that of making American citizens; and therefore we must be sure that before we begin to specialize too closely in vocational education, we shall have laid the firm foundation of the general training offered by the elementary school.
>
> Let us apply our finest educational insight and courage to the present industrial situation, insisting that mind is always able to conquer matter; that the educated

workman is the most valuable of national assets, and the nation which possesses this asset will be a successful competitor.

There should be public control of all trade schools, with representatives of labor on the board of directors of the schools.

A vocational school should aim to give as much technical education and practical experience as possible.

With these points of view could the founders of the vocational education movement be thinking in narrow terms? I doubt it!

I take great pride in what I believe to be historical fact for vocational education that "wholeness" or "completeness" of the educated worker were characteristic concepts in early 20th century discussions. The literature of the period 1906-1917 which came from the studies of the National Society for the Promotion of Industrial Education abound with terms such as "citizenship," "culture," "heritage," and the like with the unquestionable implication that learning a trade was necessary but it was not enough. To emphasize this point let us look in on the Senate of the United States, July 24, 1916. Senator Carroll S. Page of Vermont was addressing the Senate on the matter of vocational education. Talking about good citizenship, he said:

> I submit, Mr. President, that this can be done [achieve good citizenship] in no way so well as by vocational education—indeed it is probable that there is not other way in which it can be done at all.

Second, the concept of "who" in vocational education. Despite some popular opinion, and in reality some evidence of elitism, the "who" has had a broad and general interpretation. Much of the early discussion about who should be included in the vocational education program centered around (1) students in high school, and (2) employed adults. Not all students in high school were included—only those with a purpose; the rowdy and unmotivated students didn't get too much attention. A person had to want to get into the vocational education program; his intentions about the program had to be honorable and he had to supply his own motivation to succeed. In no way was the troublemaker welcome in a vocational education class.

In some respects vocational education represented an investment in latent talent of the so-called "top group," but not quite. One of my very favorite quotations from the early history about the "who" in vocational education was pronounced in 1908 as follows: "Race, creed, color, sex, or national origin shall not debar anyone from vocational education." And this was in 1908—it is only now, in 1976, sixty-eight years later that we have become completely sensitive to this principle in organizing and operating our program.

So much for the high school student. Let's look at the employed adult. Isn't this restrictive? Undemocratic? During the formative period of vocational education anyone with a will to work and with a strong back had little trouble in finding a job. Unemployment was not a commanding national problem. The target population was the employed adult who wanted to better his position in the world of work and who had the will to do so. Providing such persons with an educational opportunity to improve their standards of living represented the enticing goal of the period. Subsequent legislation and regulations related to that legislation expanded considerably the "who" of the adult population. Does this mean that the founders of vocational education goofed? Not at all—what they did was entirely proper for the period. All that has happened in the later period is that we have tried to adjust the implementation of this principle about vocational education for adults so that it is in tune with social, economic, and technological needs.

The idea of the "who" in vocational education is very confusing to the casual observer. If the founders of the vocational education movement were so complete in their analysis of the foundations of vocational education, why didn't they make provision for post-secondary students, special students, hard core unemployed, and others as is evident in the '68 amendments? To answer the question one must go back to the principle previously stated—"race, creed, color, sex, or national origin should not debar anyone." It is clear that the principle does not leave anyone out of the program. In later legislation we merely clarified the principle by added words such as "all" in relation to people, communities, and occupations. Probably less than 20 percent of the persons of high school age were in high school in 1917. Such students were generally the cream of the crop, and among these students were thousands who wanted something out of high school in addition to the standard curriculum. The high school vocational education program was beamed toward keeping these students in school. I am not aware of any studies that prove the point, but I prefer to believe that in 1917 we did in fact keep students in high school who otherwise would have dropped out.

Today, instead of less than 20 percent of the students of high school age in school we have close to 90 percent or more in school. The self-motivated of the 1917 group are still in school, but in addition we have all of the rest including the unmotivated and the potential dropout. But the principle is still good—it merely needed clarification in 1963 and 1968 so that implementation procedures would not neglect the total group. The later acts of Congress made a specific attempt "not to debar anyone" by citing specifically the mission of vocational education in relation to high school persons with special needs. Later this was further clarified by adding the words "disadvantaged" and "handicapped." In short, all persons, boys and girls alike, should have an opportunity to enter a vocational education program. The only qualifier about the "who" in high school is the persistent theme of "persons who can profit from the instruction."

The reason that post-secondary programs were not specifically mentioned in 1917 is that outside of the four-year colleges there were few programs available. It was generally a clean break from high school to a four-year college. There were only a handful of junior colleges at the time and these institutions did not embrace a vocational theme. The need for post-secondary vocational instruction in institutions other than the community colleges existed long before it was permitted by vocational education law. But it was the vision of President Kennedy that brought the concept into clear focus when he appointed a Panel of Consultants on Vocational Education in 1961. The Panel pulled all the stops—it was obvious that modern implementation of vocational education required programs in post-secondary institutions. But even this was consistent with the principle of not debarring anyone from vocational education because of race, creed, color, sex, or national origin. Earlier points of view cited the need for "technical education" as partial justification for vocational education at post-secondary institutions, but it is presently conceded that post-secondary instruction in no way needs to be limited to technical courses.

The adult program has been vastly expanded (the greatest future growth in vocational education can be expected in this area) not because of any failure to properly identify the adult group, but because of the imperative need to serve the adult population with an <u>educational</u> (not manpower) program: an educational program that <u>prepares</u> a person for a job—not just <u>puts</u> a person on a job; an educational program that provides for the masses of persons who have fallen through the cracks of the educational and social structure. It includes a vast variety of special services—English as a second language, bilingual instruction, basic adult education, retraining, upgrading, and updating of knowledges and skills needed for success on the job, or to seek a new job. This is the great challenge and the future of vocational education.

A preview of the "who" in vocational education cannot be completed without observing the new directions in regard to women in vocational education. Although provided for in principle earlier than 1917, it was not until about World War II that we began to discard ideas about "women's occupations." It has been demonstrated time and again that a woman can enter any occupation she wants to enter. Implementation has not proceeded as rapidly as theory, but these changes are noticeable in programs today. Recently a young lady called at my office and expressed a desire to enter an automechanics program. I found a school near her home, called the director of vocational education, and told him of her request. The director said, "well, it is a bit late today, but if she can be here by 8:30 in the morning, she is in." This would not have happened in 1917 because implementation had not caught up with the principle.

Third, the concept of what constitutes vocational education. Vocational education has been, is now, and will be in the future, related to people and the work they do. Now, it includes nearly all people and nearly all jobs.

Because the Morrill Acts had provided for vocational education of college grade—that is, preparation for occupations that require four or more years of preparation beyond the high school—the vocational education movement founded in 1917 focused upon job preparation that could be achieved in programs offered in educational institutions of less than college grade. Such programs were identified in terms of jobs in the occuaptional areas of agriculture, trades and industries, and home economics.

For a long time this division of kinds of jobs worked out well. Later business programs entered the picture, as did health occupations and others. The variety of educational needs became complex when preparation for new occupations was introduced. These needs did not fit very well into the nice neat categories of agriculture, trades and industries, and home economics. Consequently, the Vocational Education Act of 1963 changed the focus of funding and identification from occupations to people. But it did not change the emphasis upon both people and the work they do. Thus it was no longer necessary to force an occupation into a category it did not fit. Take landscape architecture and planning for example. Is it agriculture, or is it trade and industrial education? When I was first confronted with this particular problem we resolved the issue by taking the position that up to the point that the instructor planted a petunia the occupation was definitely trade and industrial education, after that it was definitely agriculture. The Vocational Education Act of 1963 said in effect, "what difference does it make? The mission of vocational education is people and the work they do, and all occupational needs are to be solved for all kinds of people. Don't worry about what area the job belongs to—provide the training if it is needed."

It has been historically true that only those occupations which were "socially useful" were included in the purview of vocational education This eliminates bank robbing and dope selling because society does not take kindly to these occupations as a means of earning a living.

Associated with the concept of what constitutes vocational education is the idea that not only must the occupation for which preparation is needed exist, but also that the preparation should be given as closely as possible to the time of use. This point of view raises a whole host of controversial details with which vocational education must deal. Many of these problems did not exist in 1917 because it was clear that the preparation was given when needed and that the person went to the job immediately after training.

One aspect of what constitutes vocational education that has always intrigued me is how to tell by the name of a course whether or not it is vocational. The historical record is not too clear on this point, so I have jumped at a few conclusions unaided by history. My reasoning is something like

this—it is not the name of the subject that makes it vocational, it is the intent of the person. A course in carpentry, for example, is vocational only if the persons enrolled intend to use such instruction as a means of earning a living. Only in vocational education have we attempted to corral persons with common occupational goals into one program or class and then refer to the class as vocational. But there is nothing inherent in the subject matter of carpentry that makes it vocational it is the intent of the learner that matters.

So what constitutes vocational education? From a subject matter point of view it consists of preparation in the knowledges and skills required for real occupations. We call the course a vocational education course because we have gathered together a number of people who have common vocational goals. Generally we do not provide such instruction for people who have avocational goals. Vocational education subject matter is concerned with developing the productivity of the nation and with providing competent persons who can command existing jobs and occupations emerging on the horizon.

From the people's point of view vocational education consists of high school students, regular or with special needs; post-secondary school students enrolled in a variety of institutions; and adults of all kinds, classes, ages, and ethnic groups who are planning to enter the occupational world for the first time or who desire to upgrade their position in the world of work.

From a social point of view we are concerned with increasing the standard of living for millions of people. One historical note in this regard comes from the late 1800's. A person enrolled in a private school, and upon completing the course returned to work and wrote the principal of the school that prior to the course his earning power was 25 cents per hour. After completing the course he was able to earn 50 cents per hour. What happens to a person, a family, social stability when the wage earner is able to double his income? Granted that wages and working conditions of 1976 are much different from those of 1917, the principle of the social concern and relationship of vocational education to social well-being has not changed.

For the future in vocational education, at least through the 70's, the challenge is in the word OUTREACH. No longer can we open the school door to those who knock—we are obligated to go out and seek the people who need and can profit from vocational education. This point of view was inherent in the attitudes of our founders, it was accentuated greatly in the vocational education acts of 1963 and 1968, and I am confident that it will be confirmed even more positively by Congress in a vocational education act of 1976.

Fourth, the concept of professional association. The vocational movement in education developed from the vision of two men, Dr. James P. Haney, director of Manual Training for the New York Public Schools, and Professor Charles R. Richards, Teachers College, Columbia University. On June 9, 1906, Haney and Richards met with thirteen other persons at the Engineers Club in New York City to discuss the formation of an organization to promote the ideas involved in vocational education. The organization which resulted from the meeting was the National Society for the Promotion of Industrial Education. One of the secretaries of NSPIE was Dr. Charles A. Prosser, the acknowledged father of vocational education. It was NSPIE, and the members who believed in the necessity of professional association, who provided the motivation to secure the first vocational education act in 1917.

In 1918, when the goal of federal aid had been achieved, the NSPIE changed its name to the National Society for Vocational Education. In 1925, it joined the Vocational Education Association of the Middle West (which had been organized in 1914) to form the present American Vocational Association. Based upon the foundations set by the earlier professional associations, great gains in

vocational education have occurred under the leadership of the American Vocational Association. In 1917 the association numbered only about 1,000 members; now in 1976, we are a professional association of more than 55,000 persons and growing. Our last convention in Anaheim drew 9,300 persons into professional discussion—the second largest educational meeting in the nation.

The American Vocational Association is vocational education's strongest asset. Without AVA we would not have achieved the position we now occupy in vocational education and we will continue to strengthen vocational education in the nation only through the American Vocational Association. The fine hand of our professional association was involved in the George-Deen Act of 1936, the George-Barden Act of 1946, the Vocational Education Act of 1963, the Vocational Education Amendments of 1968, and has contributed much to the Congress recently as that body formulates the vocational education amendments of 1976. Through AVA we develop professional strength, professional standards, and self-renewal that affects all kinds of vocational education activities and progressive leadership.

Our present day operations are all based upon principles laid down during the formative period of vocational education. Everything we do today has a basis in our past. We account for change in vocational education by the frequent reinterpretation of these basic principles. Thus the implementation of vocational education changes but the basic principles stand. The vocational education amendments of 1976 will represent another new interpretation of the foundation structure of vocational education. By such continual reinterpretation we are able to keep vocational education up to date and in tune with social, economic, and technological change.

QUESTIONS AND ANSWERS

Question: I'd like to ask if in your research you ever ran across Professor McGruder from Ohio?

No. One of the things we need to do in vocational education is to encourage more people to take an interest in the history of vocational education. We used to have a lot of people in this area but for some reason not very many people in vocational education are interested in the historical background. Just a few strange people, like myself, and a few others seem to get deeply motivated in this area.

Question: Is there anything new on the legislative scene since the AVA convention in Anaheim?

I guess that there is nothing generally new in the vocational education legislation. We do have a Senate bill. The House has delayed its bill, probably to determine what happens to the Senate bill. My guess is that within the next few weeks the House bill will be introduced. While we were at the AVA convention we did have introduced a bill on Career Education, HR 11023, introduced by Congressman Perkins on December 4. I presume that the Senate and the House will "mark-up" their bills in the near future.

Question: I have enjoyed your history very much. But there is one area that you didn't get into; it's what I describe as the Circadian Rhythms of vocational education. I have been very much interested through the years in watching how periods in society want to have vocational education closely related to other educational components of society and how reversals want to move it out in isolation. When Massachusetts was trying to move vocational education closer to the heart of their educational system the governor said, "I demand that you move it and keep it separate." Is there any consistency in these kinds of rhythms or any projections that you might want to comment on?

In order for vocational education to survive in the first place, it had to be pretty independent. At that period of time, the early years of the vocational education movement, we built, in a sense, a kind of strong wall around vocational education to protect it. Now, vocational education has come of age, and we don't need that wall anymore. We can fend for ourselves. There are twice as many people enrolled in vocational education in this country than in all of the four-year colleges and universities in the nation. We're a big, big operation. We don't need to have the kind of protection that we used to have.

Now, one other thing that has always bothered me, and some of my colleagues have jumped on me about the matter is the problem of what they call the separateness of vocational education. Martin Essex and John Letson used to talk about this at great length. I have never been able to understand

very clearly from them, and others, precisely what they mean. There is no such thing as a general vocational education program. But what happens when you integrate vocational education with academic and general education? Two things could happen which can be referred to as a mechanical mixture or a chemical mixture. In a mechanical mixture, if you mix ping-pong balls and golf balls together you can distinguish the two at the end of the mix—that is if you don't mix them too hard. You can still identify the ping-pong ball and the golf ball—this is a mechanical mixture. The other type of integration is representative of a chemical combination where we begin with two elements and end with two others, neither of which resembles the two original elements. I just cannot believe that the chemical combination kind of integration is what we really want. The founding fathers of vocational education wanted both a general program of education and a vocational program to be a part of the education of all people.

Question: History gives us insight into the nature of the foundations of vocational education. You have already said way back there in 1907 that they were far thinking, far reaching, but it never got down to the teacher who was in the classroom. Do we not have the very same problem in 1976 that we had in 1907?

Yes, I am sure that we do. In the final analysis implementation of vocational education theory is made by the classroom or shop teacher. When that teacher does not understand thoroughly his vocational heritage he can become like the person "who lost his purpose, so he doubled his effort."